

#### ABSTRACT

A method for reducing a sulfur-containing compound by hydrogenation using a noble metal catalyst which method is exemplified by an industrial method for producing a 2-alkyl-3-aminothiophene derivative with high economical efficiency by hydrogenating a 2-alkenyl-3-aminothiophene derivative using the noble metal catalyst. 2-Alkyl-3-aminothiophene derivatives are useful compounds in the fields of medicine and agriculture, and in particular, useful in bactericides for agriculture or gardening, or intermediates of the bactericides. The hydrogenation reaction temperature is controlled at 150°C to 300°C and the method allows the used noble metal catalyst to be recovered and reused.